

**CLAIM AMENDMENTS**

**IN THE CLAIMS:**

1. (Original) A process for the manufacture of temperature-sensitive polymers, or mixtures thereof, using a heat transfer fluid to control temperature during said manufacture, wherein said heat transfer fluid comprises a hydrocarbon fluid selected from aliphatic hydrocarbons, alicyclic hydrocarbons, aliphatic- or alicyclic-substituted aromatic hydrocarbons, or mixtures thereof, said hydrocarbon fluid having a boiling point from 220°C to 250°C and a melting point less than 40°C.
2. (Original) The process of claim 1 wherein said hydrocarbon fluid has a melting point less than or equal to 20°C.
3. (Original) The process of claim 1 wherein said heat transfer fluid further comprises biphenyl, diphenyl oxide or a biphenyl/naphthalene mixture, provided the heat transfer fluid has a boiling point from 220°C to 250°C and a melting point less than 40°C.
4. (Original) The process of claim 1 wherein said heat transfer fluid comprises a fluid selected from phenylcyclohexane, bicyclohexane, at least one hydrogenated biphenyl having a level of hydrogenation between phenylcyclohexane and bicyclohexane, or mixtures thereof.

5. (Currently Amended) The process of claim 4 wherein said heat transfer fluid is selected from the group consisting of phenylcyclohexane, bicyclohexane or and mixtures thereof.
6. (Original) The process of claim 5 wherein said heat transfer fluid is bicyclohexane.
7. (Original) The process of claim 5 wherein said heat transfer fluid is phenylcyclohexane.
8. (Original) The process of claim 5 wherein said heat transfer fluid is a mixture of phenylcyclohexane and bicyclohexane.
9. (Original) The process of claim 4 wherein said heat transfer fluid further comprises biphenyl, diphenyl oxide or a biphenyl/naphthalene mixture, provided the heat transfer fluid has a boiling point from 220°C to 250°C and a melting point less than 40°C.
10. (Original) The process of claim 1 wherein the temperature-sensitive polymer has, under ambient conditions, a melting point in the range of from 230°C to 248°C and wherein the boiling point of said heat transfer fluid is, under ambient conditions, about 230°C to about 245°C.
11. (Original) The process of claim 10 wherein the boiling point of said heat transfer fluid is in the range of from about 235°C to about 243°C.

12. (Currently Amended) The process of claim 1 wherein said temperature-sensitive polymer is selected from the group consisting of nylon 6, nylon 11, nylon 12, polytrimethylene terephthalate, polybutene-1, polybutylene terephthalate, polyethylene terephthalate, polypropylene, ~~or~~ and high-density or low-density polyethylene, said polymer having a melting point, under ambient conditions, in the range of from about 230°C to about 248°C.

13.(Original) The process of claim 1 wherein said temperature-sensitive polymer is polyethylene terephthalate or a copolymer thereof.

14. (Currently Amended) The process of claim 1 wherein said temperature-sensitive polymer is selected from the group consisting of poly(methylmethacrylate), a polyacetal, a polyionomer, an EVA copolymer, cellulose acetate, hard polyvinylchloride ~~or~~ and polystyrene.

15. (Original) A process for the manufacture of temperature-sensitive polymers, or mixtures thereof, using a heat transfer fluid to control temperature during said manufacture, wherein said heat transfer fluid comprises a fluid prepared by the catalytic hydrogenation of biphenyl at suitable temperature and hydrogen pressure, wherein hydrogenation is stopped when the refractive index of the hydrogenation reaction mixture at 25°C is in the range of 1.4775 to 1.544.

16. (Original) The process of claim 15 wherein the refractive index of said heat transfer fluid is 1.4775 to 1.5236.

17. (Original) The process of claim 15 wherein the refractive index of said heat transfer fluid is 1.4775.

18. (Original) The process of claim 15 wherein the refractive index of said heat transfer fluid is 1.523 to 1.5236.

19. (Original) The process of claim 15 wherein said heat transfer fluid further comprises biphenyl, diphenyl oxide or a biphenyl/naphthalene mixture, provided the heat transfer fluid has a boiling point from 220°C to 250°C and a melting point less than 40°C.

20. (Original) The process of claim 15 wherein the temperature-sensitive polymer has, under ambient conditions, a melting point in the range of from 230°C to 248°C and wherein the boiling point of said heat transfer fluid is, under ambient conditions, about 230°C to about 245°C.

21. (Original) The process of claim 20 wherein said temperature-sensitive polymer has a melting point in the range of from about 235°C to about 243°C.

22. (Currently Amended) The process of claim 15 wherein said temperature-sensitive polymer is selected from the group consisting of nylon 6, nylon 11, nylon 12,

Application of: Brown, Jerry L.  
Serial No.: 10/708,026  
Amendment A

polytrimethylene terephthalate, polybutene- 1, polybutylene terephthalate, polyethylene terephthalate, polypropylene, ~~or~~ and high-density or low-density polyethylene, said polymer having a melting point, under ambient conditions, in the range of from about 230°C to about 248°C.

23. (Original) The process of claim 15 wherein said temperature-sensitive polymer is polyethylene terephthalate or a copolymer thereof.

24. (Currently Amended) The process of claim 15 wherein said temperature-sensitive polymer is selected from the group consisting of poly(methylmethacrylate), a polyacetal, a polyionomer, an EVA copolymer, cellulose acetate, hard polyvinylchloride ~~or~~ and polystyrene.

25. (Original) An article produced by the process of claim 1.

26. (Original) An article produced by the process of claim 4.

27. (Original) An article produced by the process of claim 15.